CA2ALSWH 10
85W01
c. ✓

ial Wastes in Alberta

SOME QUESTIONS AND ANSWERS

88-05117/

The site for the Special Waste Management facility is located near Swan Hills, Alberta, chosen following a five-year program of site selection and public involvement by the Alberta government. The Alberta Special Waste Management Corporation was established in April, 1984 to implement an environmentally acceptable Special Waste System for the province.

The Questions and Answers in this brochure provide some detail of the System. The Corporation welcomes your enquiries.

What are Special Wastes?

There are many wastes produced by our society that cannot be disposed of by simple burning, burial, or treatment in a sewage plant. These special wastes require specialized management and disposal. Some special wastes can pose a potential threat to human health, other living organisms, or the environment because of their chemical, biological or physical properties. They can be in liquid, solid or gaseous form.

Based on estimates, 90 000 tonnes of Special Wastes are generated every year in Alberta - by industry, agriculture, hospitals, laboratories and households. While much of this waste is recycled or treated on-site by major industrial generators, the remainder - some 20 to 40 per cent - must also be treated and residues properly managed. The Special Waste treatment facility for Alberta, located near Swan Hills, will perform this function.

Special Wastes are generally classified as organics or inorganics.
Organics include oils, solvents, tank bottom sludge, infectious waste and PCB's.
Inorganics are acids, alkalis, metal sludge, photo sludge, asbestos and sulphur.

Why a Special Waste System?

Effective management of all waste streams means a cleaner, safer environment and protection for our natural resources. Alberta is considered to be a leader in North America - balancing environmental protection with economic activity. In the '80s, an important aspect of environmental protection is Special Waste management. Throughout North America, many industrialized jurisdictions are recognizing the need for Special Waste Management Systems. Their objectives are to separate Special Wastes from normal waste in order to manage them. The hazards that some Special Wastes pose can then be controlled.

Five years ago, the Government of Alberta gave priority to developing an overall system for Special Wastes. As a result, the System is unfolding in an orderly fashion, with public acceptance and legislative support. The System is being planned to ensure environmental protection and human health and safety as well as to enhance Alberta's industrially competitive position. An environmentally safe site has been chosen for the central treatment facility near Swan Hills, where Alberta's Special Wastes will be stored, treated and disposed of, using technically sound methods. But there is more to the System than the central facility itself.

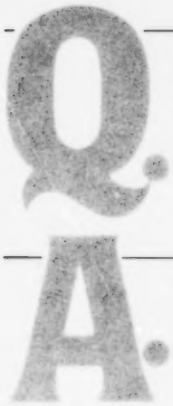
What does the System Include?

- recycling, reduction and reuse of wastes (including waste exchanges);
- treatment and disposal of some wastes on site by the generators themselves under controlled conditions;
- province-wide collection and secure storage of special wastes en route to the central facility;
- safe, controlled transportation of special wastes including a manifest (waybill) system;
- waste analysis, so that proper treatment can be researched, determined and given; and,
- a supportive regulatory framework.

Q. Who will Oversee the System?

A. Overseeing special waste management activity in Alberta is The Alberta Special Waste Management Corporation. It is responsible for:

- the establishment of Alberta's Special Waste Management System;
- the health and safety of the public and the environment with respect to the Special Waste System;
- planning, implementing and managing the System in such a way that it does not detract from the competitive position of industry in Alberta; and,
- involving the private sector and public interest in the design and operation of the System.



What are Alberta's Special Waste Policies?

Unlike other parts of North America, Alberta has not had serious environmental problems resulting from improper waste dumping. Therefore, the Province is in a position to implement a preventative care program.

Recovery, Recycling, Reuse

The Alberta Government supports recycling and reuse of Special Wastes wherever practicable, just as it encourages the recovery of other waste materials of economic value.

In situations where wastes still have 'chemical strength' and can be used as a feedstock in another process, waste exchanges are effective. Alberta participates in the Canadian Waste Materials Exchange, so that generators have the chance to exchange their wastes with potential users.

Treatment, Residue Disposal

While some Special Wastes can be reused, the remainder require proper treatment and disposal. Already, Special Wastes are treated on-site at several major industrial plants in the province. However, it is not always feasible or economically viable for all generators to treat and dispose of their own wastes on-site. The Special Waste System will handle this off-site waste stream.

The long-term perpetual care of the central site located on Crown land rests with the Corporation and the Government.

Transportation Costs

In the interest of equity for generators, Special Waste transportation rates will be uniform throughout the province. Regardless of their location, no Alberta generator will be disproportionately advantaged or disadvantaged by the costs of shipping Special Wastes through the System to the central facility. This is referred to as a "postage stamp" policy.

Who is Responsible?

The Government as Policy Maker and Regulator

The Government has the overall authority and is responsible for the policy framework within which the total system is planned, implemented and operated. Regulatory authority lies with the various government agencies which set and enforce standards, approve and license facilities, and monitor their operations.

The Corporation as Facilitator

The Special Waste Management Corporation's most important role is to oversee the development and coordination of the System.

The Private Sector as user, developer, owner, operator

In addition to using the System, there are roles for the private sector. To the maximum extent possible, the private sector will develop the components of the system, particularly the central facility and the transportation component. Where private enterprise is unable or unwilling to develop, own and/or operate system components, the Special Waste Management Corporation will assume the responsibility of these components as a last resort.

The Public Interest

The public interest is represented in the membership of the Alberta Special Waste Management Corporation. In addition, the Corporation is planning to establish a series of advisory panels as necessary on various aspects of the System.

What are the Components of the System?

The Special Waste Management System consists of all physical components related to Special Wastes management. It includes: collection centres and transfer stations, transportation, a testing laboratory(s) for waste analysis and research, secure storage, and a central treatment facility including secure landfill and deepwell(s) to dispose of treated residues.

The total System also includes those components which are owned and operated by the generators themselves, such as on-site treatment and disposal facilities, and those aspects which the Corporation must ensure are in place, such as an off-site collection network. So, while the generators are responsible for proper Special Wastes Management on-site, it is the Corporation which coordinates the entire System and ensures that the necessary off-site components are available and operational.

The total System will also include special waste recycling, exchange programs and by-product reuse.

The complete System is expected to be fully operational in 1988.

What will Happen to the Wastes at the Central Facility?

The cornerstone of the System is the central facility which will be located on Crown land near Swan Hills.

The facility will include a receiving area, secure storage, a laboratory, and treatment processes, as well as a secure landfill to receive residues. It will also have a deepwell for the disposal of treated liquid residues.

Special Wastes received by the facility will be properly treated prior to disposal. There will be a range of treatments for inorganics such as filtration, separation, neutralization and solidification. High temperature treatment is required for organics - incineration or other appropriate technology. Any emissions from the process will comply with applicable regulatory requirements and standards.

To assist the viability of the facility development, the Government is providing utilities and services to the site.

Transportation

Plans are underway to implement a manifest system, all part of a national program to track Special Wastes from source to disposal. Alberta's Transportation of Dangerous Goods Control Act is designed to control the movement and to ensure the safe haulage of both Special Wastes and dangerous goods. In the event of spills or road accidents, Alberta has an emergency response system in place.

The operator(s) will be required to train their drivers in all aspects of Special Wastes haulage and to use proper equipment. In addition, the operator will supplement the existing provincial emergency response system.

What Legislation is in Place?

Numerous Acts and Regulations affect the management of Special Wastes in Alberta. These Acts and Regulations are administered by various departments and agencies such as:

Department of Environment

- regulates Special Waste
- permits and licenses Special Waste facilities
- sets and enforces air and water quality standards
- will operate the manifest system to track wastes through the System
- monitors emissions

Energy Resources Conservation Board

- permits and licenses deepwells

Alberta Disaster Services

- controls transportation of dangerous goods including special wastes

How will the System be Implemented?

The Alberta Special Waste Management Corporation will interact with generators, the public and relevant government agencies. Cooperation is essential to develop and implement, create and maintain a comprehensive, economically viable and environmentally acceptable Special Waste Management System for Alberta.

FOR FURTHER INFORMATION:

COMMUNICATIONS
ALBERTA SPECIAL WASTE
MANAGEMENT CORPORATION
SUITE 800, PACIFIC PLAZA
10909 JASPER AVENUE
EDMONTON, ALBERTA
T5J 3L9

(403) 422-5029

Toll-free in Alberta:
1-800-272-8873

The System
is the public, industry and government working
hand-in-hand in the interest of
proper Special Waste Management.

NO.1 IN A SERIES